

Listing of Claims

- 1-4. (Canceled)
5. (Previously Presented) An image search method, comprising:
determining color similarity between a reference image and a target image
each of which is represented by hierarchical grid levels, said determining step including
cross-matching grid levels of the reference image and target image, such that a grid on one
level of the reference image is matched to a grid of a different level in the target image;
and
searching images based on a content-based query by a user.
6. (Previously Presented) The method of claim 8, wherein said determining
step includes determining similarity of reliability information indicative of accuracies of
the region representative color values between the grid levels of the reference and target
images.
7. (Previously Presented) The method of claim 5, wherein said determining
step further includes: matching the grid levels of the reference image with respective ones
of the grid levels of the target image.

8. (Previously Presented) The method of claim 5, wherein said determining step includes: matching region representative color values between the grids levels of the reference and target images.

9. (Previously Presented) An image search method comprising:
determining color similarity between a reference image and a target image
each of which is represented by hierarchical grid levels; and
searching images based on a content-based query by a user, wherein the
determining step comprises:
determining a similarity between cells in the hierarchical grid levels of the
reference and target images in accordance with steps that include:
multiplying color similarity (Color_Sim) corresponding to a similarity of
region representative colors between cells in the grid levels of the reference and target
images and a first weight,
adding a value obtained by multiplying similarity (I) representing a
similarity of a reliability between cells in the grid levels of the reference and target images
and a second weight to the color similarity (Color_Sim), and
normalizing the cell similarity.

10. (Previously Presented) An image search method comprising:

determining color similarity between a reference image and a target image each of which is represented by hierarchical grid levels; and

searching images based on a content-based query by a user, wherein the determining step includes determining a similarity between same grid levels in the reference and target images based on a total value summed by shifting in a horizontal and vertical direction based on a shifting amount by a difference of widths and heights between grid levels when two grid levels are compared and the similarity is calculated.

11. (Previously Presented) An image search method comprising:

determining color similarity between a reference image and a target image each of which is represented by hierarchical grid levels; and

searching images based on a content-based query by a user, wherein the determining step includes determining a color similarity between the grids of the reference and target images based on a value summed shifting in a horizontal direction and a vertical direction by a difference in width and heights between the grid levels.

12. (Previously Presented) The method of claim 5, wherein a cell similarity between grid levels of the reference and target images is used for searching a same position and different position between same levels in the case that the search is performed by matching a color region.

13. (Previously Presented) An image search method comprising:

determining color similarity between a reference image and a target image each of which is represented by hierarchical grid levels, said determining step including cross-matching grid levels of the reference image with grid levels of the target image, such that a grid on one level of the reference image is matched to a grid of a different level in the target image; and

searching images based on a content-based query by a user, wherein a color region matching operation between the grid levels of the reference and target images is directed to searching at a same position of different levels and at a different position when searching the color similarity between different levels.

14-26. (Canceled)

27. (Previously Presented) The method of claim 5, wherein the determining step is performed using a multilevel image data structure which is expressed based on an image grid having at least two different hierarchical levels.

28. (Canceled)